### PATENT COOPERATION TREATY

#### From the INTERNATIONAL BUREAU

### **PCT**

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rule 72.2)

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**JAPON** 

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MIYOSHI

Date of mailing (day/month/year)
09 June 2005 (09.06.2005)

Applicant's or agent's file reference

JHTK-59-PCT

International application No. PCT/JP2003/015613

IMPORTANT NOTIFICATION

International filing date (day/month/year)
05 December 2003 (05.12.2003)

Applicant

HITACHI CHEMICAL CO., LTD. et al

### 1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

#### 2. Transmittal of the copy of the translation to the elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

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### 3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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### PATENT COOPERATION TREATY



## **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference  JHTK-59-PCT	FOR FURTHER AC	TION	See Form PCT/IPEA/416			
International application No. PCT/JP2003/015613	International filing date 05 December 200		Priority date (day/month/year) 05 December 2002 (05.12.2002)			
International Patent Classification (IPC) or n C08J 5/18, G11B 7/24, B32B 27	ational classification and /30// C08L 101:00	IPC				
Applicant	НІТАСНІ СНЕМІ	CAL CO., LTD.				
This report is the international prelin     Authority under Article 35 and trans	ninary examination repo smitted to the applicant a	rt, established by this eccording to Article 36	International Preliminary Examining 5.			
2. This REPORT consists of a total of sheets, including this cover sheet.						
3. This report is also accompanied by a a. (sent to the applicant and		reau) a total of	sheets, as follows:			
sheets of the desc and/or sheets con Administrative In	taining rectifications aut	awings which have be horized by this Autho	een amended and are the basis of this report ority (see Rule 70.16 and Section 607 of the			
sheets which sup- beyond the discle Supplemental Bo	sure in the international	which this Authority application as filed,	considers contain an amendment that goes as indicated in item 4 of Box No. I and the			
	, contain ndicated in the Supplem	ning a sequence listin	pe and number of electronic carrier(s)) g and/or tables related thereto, in computer o Sequence Listing (see Section 802 of the			
This report contains indications relations.	ting to the following iter	ns:				
Box No. I Basis of the re	eport					
Box No. II Priority			ding and and industrial analisability			
	Box No. III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  Box No. IV  Lack of unity of invention					
Box No. V Reasoned stat	tement under Article 35(	2) with regard to nove	sity, inventive step or industrial applicability;			
Box No. VI Certain docur	explanations supporting a ments cited	such statement				
1 =	ts in the international app	plication				
Box No. VIII Certain obser	vations on the internation	nal application				
Date of submission of the demand		Date of completion of	of this report			
04 June 2004 (04.06.2	2004)	30 Se	ptember 2004 (30.09.2004)			
Name and mailing address of the IPEA/JP		Authorized officer				
Facsimile No.		Telephone No.				

Translation

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/015613

Box No.	I i	Basis of the report
	vise in	to the language, this report is based on the international application in the language in which it was filed, unless dicated under this item.
	This whicl	report is based on translations from the original language into the following language, h is language of a translation furnished for the purpose of:
		international search (under Rules 12.3 and 23.1(b))
		publication of the international application (under Rule 12.4)
	$\Box$	international preliminary examination (under Rules 55.2 and/or 55.3)
furnis	hed to re not	to the elements of the international application, this report is based on (replacement sheets which have been the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" annexed to this report):
		nternational application as originally filed/furnished
. $\square$		escription: , as originally filed/furnished
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	a seq	uence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3.	The a	mendments have resulted in the cancellation of:
1		the description, pages
	Ħ	the claims. Nos.
	Ħ	the drawings, sheets/figs
	H	the sequence listing (specify):
	片	any table(s) related to sequence listing (specify):
	Ш	any table(s) related to sequence fishing (specify).
4.	made	report has been established as if (some of) the amendments annexed to this report and listed below had not been established as if (some of) the amendments annexed to this report and listed below had not been established as indicated in the Supplemental Box to 70.2(c)).  the description, pages
* If ite	m 4 ap	oplies, some or all of those sheets may be marked "superseded."

PCT/JP03/15613

# Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

atement (N)	Claims	3, 4, 6, 7, 9-24, 26, 28, 30, 33, 35, 36, 38, 42, 43	Y
Novelty (N)	Ciamis		
	Claims	1, 2, 5, 8, 25, 27, 29, 31, 32, 34, 37, 39-41	N
Inventive step (IS)	Claims		Y
	Claims	1-43	N
Industrial applicability (IA)	Claims	1-43	Y
	Claims		N

2. Citations and explanations (Rule 70.7)

Document 1; EP, 1006395, A1 (Dai Nippon Printing Co., Ltd.), 07 June 2000.

Document 2: JP, 2002-012624, A (JSR Corp.), 15 January, 2002.

Document 3: EP, 1187118, A2 (Sony Corp.), 13 March, 2002.

Document 4: JP, 2002-230854, A (Sony Corp.), 16 August, 2002.

Document 5: JP, 2000-067468, A (Teijin, Ltd.), 03 March, 2000.

Document 6: JP, 2001-243659, A (Teijin, Ltd.), 09 July, 2001.

Document 7: JP, 2000-273319, A (Hitachi Chemical Co., Ltd.), 10 March, 2000.

Document 8: JP, 2002-038036, A (Hitachi Chemical Co., Ltd.), 02 June, 2002.

The inventions of claims 2, 5, 8, 27 are described in document 1 cited in the ISR and, therefore, do not appear to possess novelty. Document 1 describes a filter for a liquid-crystal display device composed of an acrylic polymer. According to FIG. 5 and FIG. 7 of document 1, the tan $\delta$  value at a temperature of 30°C to 80°C of the film exceeds 0.04. Therefore, this optical film clearly satisfies the requirement that the integral value of tan $\delta$  be  $\geq 2$ , as described in claim 1 of the subject application.

The inventions of claims 1, 2, 25, 27, 29 are described in document 2 cited in the ISR and, therefore, do not appear to possess novelty. Document 2 describes an optical film that is composed of a cyclic olefin polymer and can be advantageously used for an optical disk. According to FIG. 1 of document 2, the  $\tan\delta$  value at a temperature of 30°C to 80°C of the film exceeds 0.04. Therefore, this optical film clearly satisfies the requirement that the integral value of  $\tan\delta$  be  $\geq 2$ , as described in claim 1 of the subject application.

International application No.

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

PCT/JP03/15613

### Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of  $\mbox{Box}\, V$  :

The inventions of claims 31, 32, 34, 37, 39 to 41 are described in documents 3, 4 cited in the ISR and, therefore, do not appear to possess novelty. Documents 3, 4 describe that it is important to match thermal expansion coefficients of the substrate and light transparent layer constituting the optical disk in order to prevent the disk from warping. Furthermore, they also disclose that an acrylic resin is used for the light transparent layer, the birefringence factor is small, the transparent layer is bonded to the substrate via an adhesive agent layer, a polycarbonate is used as the substrate material, and a PET parting film is bonded to the transparent layer.

The inventions of claims 1 to 5, 7 to 29, 35, 36, 42 do not appear to involve an inventive step based on documents 1 to 6 and documents 7, 8 cited in the ISR. Documents 7, 8 disclose a resin material comprising a vinyl polymer having a proton-donating atom association and a vinyl polymer having a proton-receiving atom association, wherein pseudo-crosslinking caused by hydrogen bonds is formed there between, this material being used as a material for an optical film having high optical transparency. Therefore, using this material for well-known optical applications disclosed in documents 1 to 6 could have easily been devised by a person skilled in the art.

The inventions of claims 6, 38 do not appear to involve an inventive step based on documents 1 to 8. Blending well-known additives into the transparent layer could have easily been done, if necessary, by a person skilled in the art, as described, for example, in documents 7 and 8.

The inventions of claims 30, 33, 43 do not appear to involve an inventive step based on documents 1 to 8 cited in the ISR. Employing a well-known material designed for optical disks of another high-density recording type, while adjusting optical characteristics thereof, could have easily been attempted by a person skilled in the art.